IN THE SPECIFICATION

Please insert the following at the end of page 8, line 16, and before the August 17, 2007 amendment in the specification beginning after page 8, line 16 (*i.e.*, the August 17, 2007 amendment in the specification will now begin after the following insertion):

In one example embodiment, listeners are provided music samples either on-line via the Internet or on a CD-ROM, with a list of questions corresponding to the music samples. The questions are used to solicit listener responses that describe music attributes and assign values to feature vectors for the attributes. A listener using a computer may download music samples from a web server with a list of questions. A questionnaire that evaluates the cognitive, emotional, esthetical, and situational effects of music on actual listeners may also be provided.

Prior to providing music samples or questions, listener information may also be collected. Also, before a listener can start listening to sample music, a training session may be conducted to familiarize a listener with the music rating process.

An example of a list of questions may be are provided to a listener prior to, after or while a listener is listening to the music sample. A listener that listens to more than one song is also asked to compare songs. Examples of questions may be grouped as follows:

Cognitive: This song is similar to the previous song; I like this song; This tune sticks in my mind; This song is simple; This song tells a story; This song emphasizes the melody;

This song emphasizes the vocals; This song is speech-like; This song has a strong beat; This song is fast; and This song has a good groove.

Emotion: This song is intense; This song is upbeat; This song sounds aggressive; This song is relaxing; This song is mellow; This song is sad; This song is romantic; and This song expresses a broken heart.

Esthetics: The singer has a smooth voice; The singer has a soulful voice; The singer has a powerful voice; The singer has a truly great voice; This song has a high voice; and This song has a sexy voice.

Social behavior: This song would be good for easy listening; This song would be good for a wild dance party; This song would be good for slow dancing; This song would be good for a workout; and This song would be good in a shopping mall.

Other questions ask the listener if the listener knows the music or has a recording of the sample. For example, a question which asks the listener if the listener can describe the situations where the music will be appropriate, and if the music sample reminds the listener of an artist(s) or song. Another example question may asks the listener to describe the song in other words.

Preferably, every question requires a response. Based upon listener response, a value is assigned to a feature vector that defines music attributes.

Expert data can be collected by providing music samples to experts accompanied by a plurality of questions. Music samples and questions to expert music listeners may be provided over the Internet, a private network and/or music CDs, etc. For example, a music expert using computer may download music samples from a web server with a list of questions.

Example questions that a music expert may be asked for collecting expert data are questions to identify music genre, for example, whether a music sample belongs to, an Alternative, a Blues, a country, an Electronic/Dance, a Folk, a Gospel, a Jazz, a Latin, a New Age, a R&B/Soul, a Rap/Hip-Hop, a Reggae and a Rock style of music. The expert is not limited to choosing a single genre, instead, the expert may choose plural genres to identify a particular music sample.

Questions establish the importance of a particular music style in a given sample, and also determine crossover between different genres. For example, if an expert that listens to a music sample and gives a high rating for Blues and Country in questions, then the music sample may have a cross-over between Blues and Country style.

Within the various genres mentioned above, there may also be sub styles, for example, Gospel, Motown, Stax/Memphis, Philly, Doo-wop, Funk, Disco, Old School, Blue-eyed soul, Adult contemporary, Quiet storm, Dance/techno, Electro/Synthetic, New Jack Swing, Retro/Alternative, Hip Hop, Rap and Gangsta, etc. Questions may also require an expert to rate music sub-styles to determine the sub-genre of a music sample.

One example question may ask an expert to identify whether a music sample is instrumental or vocal. If the music is primarily vocal, then the expert also identifies if the lead vocalist is a male or female. Another question may ask the expert to describe backup vocalist(s), if any. Still another question may ask an expert to describe a band, if any, associated with a music sample. The expert may also be asked to identify the three most important instruments that may exist in a music sample.

An expert may be given standard statements and asked to either agree or disagree with various levels of conviction. An expert may also acknowledge if the expert is aware of the music and/or has a recording of the music.

All expert responses to the foregoing questions assign specific values to the music feature vectors.

It is noteworthy that the questions described above are merely illustrative and do not limit the scope of the invention. The number and format of the questions as presented to music listeners or expert listeners may be different.

Explicit "pairwise" questions are provided to expert music listeners. Expert music listeners are provided with a pair of music samples and experts rate the similarity of the samples. Although music is provided in pairs for evaluation, the invention is not limited to providing music samples in pairs. Various other presentation techniques may be used, for example, music samples may be provided as a group of three, and so forth.